

Boston Water Works: Chestnut Hill  
High-Service Pumping Station  
2450 Beacon Street  
Boston (Brighton)  
Suffolk County  
Massachusetts

HAER No. MA-24

HAER  
MASS,  
13-BOST  
75-

PHOTOGRAPHS

HISTORICAL & DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Department of the Interior  
Washington, D. C. 20240

211  
10-10-75

HISTORIC AMERICAN ENGINEERING RECORD

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Chestnut Hill High-Service Pumping Station

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Location: 2450 Beacon Street  
Boston (Brighton), Suffolk County, Massachusetts

UTM: 19.322360.4688630  
Quad: Newton

Date of Construction: 1887

Builder/Designer: Arthur H. Vinal, City Architect

Original Use: Pumping Station

Present Use: Pumping Station

Present Owner: Metropolitan Water District

Significance: With the construction of the Roxbury Standpipe in 1870 and a small pumping station nearby, the Boston Water Board had introduced water to the higher elevations of Roxbury and other parts of Boston. The original works, however, had been designed to supply an area of about 760 acres. By 1875, with the annexations of Dorchester, Charlestown, Brighton and West Roxbury, the area requiring high-service water supply had grown to over 10,000 acres. To meet these demands, the city constructed at Chestnut Hill the existing pumping station, and about a thousand yards to the east in Brookline, a large distributing reservoir. The work was designed and executed under the direction of City Engineer Joseph P. Davis (1837-1917). The station, in the Richardsonian Romanesque style of the period, was designed by City Architect Arthur H. Vinal (1854-1923) and completed in 1887. Oldest engine extant is the 1895 triple-expansion steam pumping engine designed by Erasmus D. Leavitt (1836-1916) of Cambridgeport, then one of the country's leading mechanical engineers. (The engine was designated a National Historic Mechanical Engineering Landmark in 1973.) With the

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creation of the Metropolitan Water District in 1895, the high-service requirements of the region were divided into northern and southern systems, the northern to be supplied by an entirely new plant at Spot Pond, with the southern region, extending as far as Quincy and Hyde Park, to be supplied from Chestnut Hill. The pumping station was extended to the west in 1897-98 according to plans of Boston architects Wheelwright & Haven. A new triple-expansion pumping engine (No. 4), built by the E. P. Allis Company, was installed. This engine also remains in place. The station pumped water from the Chestnut Hill Reservoir into the Fisher Hill distributing reservoir, some 125 feet above the level of the receiving reservoir. The engines remained in use until 1954 when oil-fired turbines were installed.

Transmitted by:

Jean P. Yearby, 1984, from data compiled by  
Peter Stott

ADDENDUM TO  
BOSTON WATER WORKS, CHESTNUT HILL HIGH SERVICE  
PUMPING STATION  
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Boston  
Suffolk County  
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